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Information Item

California Postsecondary Education Commission

Executive Director's Report, June 2001

Executive Director Warren Fox will discuss issues of mutual concern to the commissioners. Included in this discussion will be information about the Legislative Analyst's economic projections for the State and the Governor's proposed "May Revise," particularly as it impacts the Commission's budget. In addition, the Director, along with Commissioner Hanff, will report on a joint meeting held last month with student leaders from each of the various systems of higher education.

Finally, the Director will report on a potential general obligation bond for higher education facilities. This report summarizes and updates information on the Commission's enrollment projections, capacity at our public colleges and universities, the need for an additional bond proposal, as well as the changing circumstances in California's economy and energy situation and how those circumstances may impact higher education.

Presenter: Warren H. Fox, Executive Director.

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

Providing for Student Access: California's Public Higher Education Facilities Needs

A Report of the Executive Director, Warren H. Fox, Ph.D.

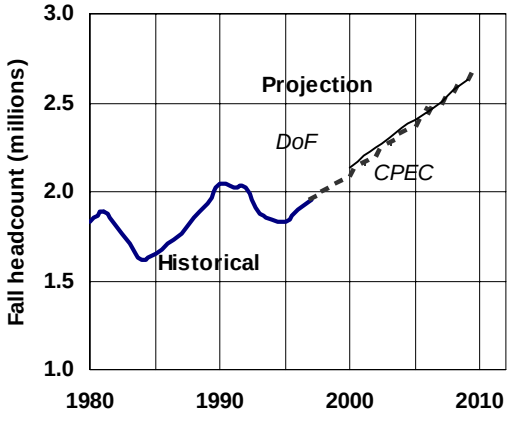
June 5, 2001

There is an urgent need for all three systems to expand their capacity by constructing new buildings.

The California Postsecondary Education Commission's current enrollment projections (as shown in Display 1, in *Providing for Progress [CPEC, 00-1]*) suggest that the demand for education at California's public colleges and universities will increase steadily for at least the next 10 years. In part, this surge is due to California's continually growing population, as well as to a continuing increase in the demand for services. As a result of these two factors, total enrollment demand at the California Community Colleges, the California State University, and the University of California will reach 2.7 million in the 2010–11 academic year, an increase of 715,000 from 1998–99 (see Display 1). In addition, California's independent colleges and universities are expected to enroll up to 70,000 students above current levels.

California's public universities and colleges do not have the capacity to accommodate such large enrollment increases. The University of California is already at capacity. At the California State University and the California Community Colleges, enrollment demand will exceed capacity within a few years. There is an urgent need for all three systems to expand their capacity by constructing new buildings. In addition, the three systems have a significant inventory of existing space that must be renovated or replaced as it becomes obsolete.

DISPLAY 1 Enrollment in California Public Universities and Colleges, 1980–2010



Source: CPEC, Dept. of Finance

A Commission analysis of enrollment demand, and construction and renovation costs, indicates that the three systems should collectively spend $1.5 billion annually if California is to provide sufficient capacity to maintain access to higher education at historic levels of quality. In the absence of this spending, California's public colleges and universities may face the Hobson's Choice of either limiting enrollments, reducing quality, or both. If the latter is chosen, students could face overcrowding, poor equipment, obsolete technology, and in general, a substandard learning environment.

The Commission recommends that the State put a bond issue for higher education on the November 2002 ballot.

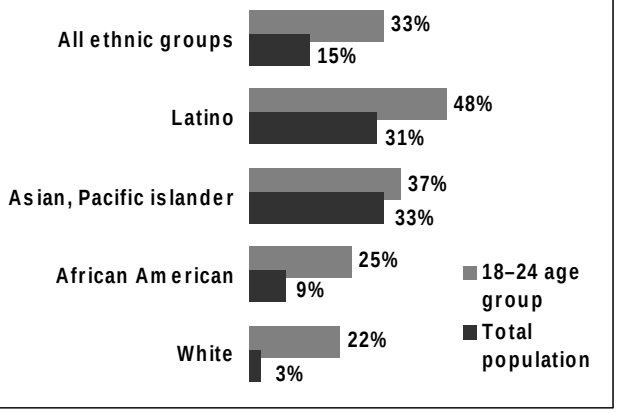
The $2.5 billion provided by the current general obligation bond issue (Proposition 1A) for higher education will be exhausted by the end of the 2001–02 fiscal year. This issue, authorized by the voters in 1998, provided $625 million annually, or just over $200 million per year for each of the three public systems. Looking forward, it is clear that such amounts will be inadequate to continue this State's tradition of quality higher education. The Commission recommends that the State put a bond issue for higher education on the November 2002 ballot. The amount should be at least $4.0 billion to be expended over four years. Such a bond issue would provide most, though not all, of the resources needed both to create new capacity to accommodate enrollment increases, and to renovate existing structures to ensure their continued usefulness.

The Commission recognizes that California's recent and ongoing energy problems will place major strains on the State's budget. However, accessible and high quality higher education are essential if California is to continue the long history of economic prosperity that remains the best assurance of opportunity for all of its residents. While few will minimize the importance of the energy crisis, it in no way diminishes the fact that the broad availability of quality higher education remains among the State's most important public purposes.

Growth in enrollment demand

During the middle and late 1980s, enrollments at California's public universities and colleges grew sharply. In the early 1990s, however, enrollments declined as limited budgets forced college and university administrators to reduce programs and acquiesce to substantial student fee increases. Then, as the economy began to recover beginning in 1993-94, enrollments resumed their upward trend, which the Commission believes will continue over the next decade. CPEC's projections indicate that fall headcount enrollment will grow from just under two million in the

DISPLAY 2 California Population Growth, 2000–2010



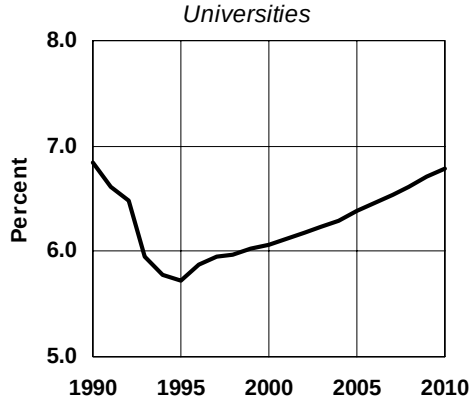
Source: Dept. of Finance

1998–99 academic year to 2.71 million in 2010–11, an increase of 715,000. These projections are consistent with projections made independently by the Department of Finance, which indicate that enrollments at California public universities and colleges will reach 2.63 million in fall 2009.

This enrollment growth is driven largely by increases in California's population. According to the Department of Finance, California will add 5.3 million people between 2000 and 2010, with the 18–24 age group, which accounts for over half of college enrollment, growing much faster than the general population. Overall, this age group will grow by one-third between 2000 and 2010, adding one million potential students. In addition, a significant part of this growth is in ethnic groups that historically have been underrepresented in public higher education, as shown in Display 2.

In addition, college-going rates, which fell sharply during the recession of the early 1990s, are now returning to normal historical levels. As shown in Display 3, the percentage of Californians attending public universities and colleges, which bottomed out at 5.7 percent in 1994, is expected to continue to recover, reaching 6.8 percent in 2010. Part of this growth is driven by the increased numbers of underrepresented groups entering public colleges and universities.

DISPLAY 3 Percent of Calif. Population Attending Public Colleges and Universities



Source: CPEC

For example, the percentage of Latino high school graduates going to the State University will increase from its current level of about 6.6 percent to 9.8 percent in 2010, as noted in Display 4. Overall, 72 percent of the increase in enrollment demand between 1998 and 2010 is the result of population growth; 28 percent is the result of increased participation in higher education.

DISPLAY 4 Percentage of Public High School Graduates Entering Public Universities

Ethnic group	CSU		UC	
	1998	2010	1998	2010
Latino	6.6	9.8	3.10	3.28
Asian, Pacific Islander	14.8	17.8	22.4	24.3
African American	7.1	10.8	2.98	3.95
White	8.1	9.0	6.24	6.86

Source: CPEC

Capacity to meet enrollment demand

Enrollment demand will exceed the capacity of California's public universities and colleges within a few years. The University of California has already

reached capacity. Enrollment demand at the California State University and the California Community Colleges will exceed capacity within a few years.

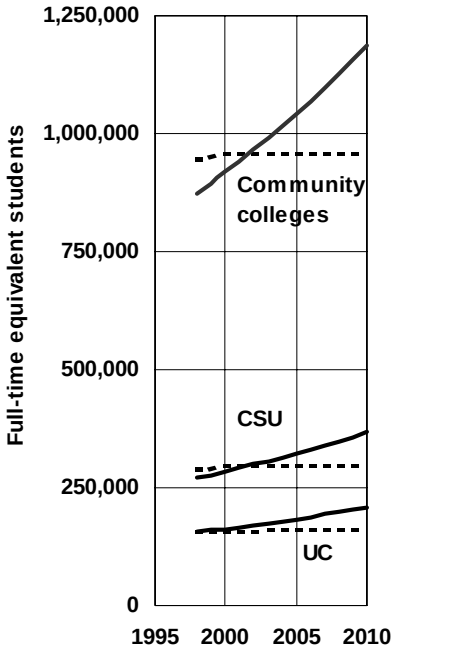
The capacity of universities and colleges is assessed using full-time equivalent student enrollment (FTES) rather than headcount enrollment. Because some students are part time, FTES is lower than headcount enrollment. FTES is 59 percent of headcount in the community colleges, 77 percent of headcount at CSU and about 90 percent of headcount at UC.

California Community Colleges. The community colleges currently have a slight surplus capacity, but that will quickly disappear with the rapid enrollment growth expected in the next decade. Community college enrollment, which is currently about 900,000 FTES, will pass the one-million mark in 2004–5, and reach 1.2 million in 2010–11.

The 'real' capacity can be as much as 10 percent lower than the 'technical' capacity . . . .

The system currently has the physical capacity to accommodate 958,000 FTES (Display 5). CPEC estimated this figure based on college physical plant information collected by the community colleges' Board of Governors, based on current space and utilization standards. CPEC's estimate reflects the practical working capacity of the community college system, after accounting for the "mismatch problem," which recognizes both geographic imbalances between campuses and populations, and internal mismatches between facilities and programs. The "real" capacity can be as much as 10 percent lower than the "technical" capacity that would exist if a perfect match existed among population distribution, program offerings, and available classroom and laboratory space at all of the State's 107 colleges.

DISPLAY 5 Enrollment and System Capacity



Source: CPEC

Currently funded projects will increase capacity to about 960,000 FTES in 2001–02. By 2002–03, projected enrollments and real capacity should be about equal. After that date, the community colleges will find it increasingly difficult to meet demand from a rapidly growing student population. Through 2010-11, the deficit will grow rapidly, reaching 227,000 FTES in the final year of the projection, nearly three times the entire full-time equivalent enrollment of the Los Angeles Community College District (Display 6).

California State University. Analysis of the physical plant of the CSU system by CPEC indicates that the system has a current working capacity of 295,000 FTES. This figure reflects recent improvements in the use of space at many State University campuses. With growing enrollments, CSU is able to make better use of large classrooms and reduce the mismatch between student demand and available space. As a result, working capacity is only 2.5 percent below total capacity, rather than the five-percent figure used in an analysis done by CPEC in 1995.

DISPLAY 6 Funded capacity and enrollment demand

School year	FTES capacity	Projected FTES enrollment	Deficit[1]
California Community Colleges			
2000–01	957,000	918,000	(39,000)
2005–06	960,000	1,042,000	83,000
2010–11	960,000	1,186,000	227,000
California State University			
2000–01	295,000	284,000	(11,000)
2005–06	298,000	322,000	24,000
2010–11	298,000	367,000	69,000
University of California			
2000–01	156,000	163,000	7,000
2005–06	160,000	184,000	24,000
2010–11	160,000	209,000	49,000

1. Numbers in parenthesis indicate a space surplus

Source: CPEC

Current projects will increase capacity to 298,000 FTES in the 2001–02 school year, a level that will be absorbed in 2002–03 by enrollment growth. In subsequent years, the deficit will grow, reaching 69,000 FTES in 2010–11. This is more than the current combined enrollment of the State University's campuses at Sacramento, San Jose, and Long Beach.

University of California. The University of California can currently accommodate 156,000 FTES. Enrollment demand already exceeds this level and the university has a capacity deficit of 7,000 FTES.

Currently funded projects will increase capacity slightly. With growth in enrollment demand, UC's capacity deficit with respect to projects actually funded will increase, reaching 49,000 FTES in 2010–11.

Closing the capacity gap

Public universities and colleges are continually seeking ways to use existing facilities more efficiently. All three systems are seeking ways to increase the occupancy rate of their classrooms, for example by offering more evening and weekend classes, and scheduling instruction year-round. Needs for new space can also be curtailed somewhat by using internet-based instruction and making library materials available electronically.

Greater demand on public campuses would exist if the independent colleges and universities were not able to enroll the students they now have, or expand their capacity.

Nevertheless, the extent to which growth in enrollment demand can be met without new public construction is limited. All three systems have a critical need for funding to maintain their existing capacity by renovating buildings that have become obsolete and to provide for enrollment growth by constructing new buildings. In the absence of significant additional capital outlay funding, the systems will be faced with the difficult choices that invariably accompany periods of retrenchment: reducing enrollment, sacrificing quality, or some measure of both.

Even without enrollment growth, maintaining the existing physical plant in serviceable condition will involve significant costs. The three systems have a total of 91.5 million assignable square feet of space (see Display 7). Educational buildings typically have a useful life of 40 years, so about one-fortieth of this space must be renovated each year. About one-third of obsolete space cannot be renovated economically and must be replaced. Also, many higher education buildings, particularly in the community colleges, are already very old, so it is probable that the need for renovation or replacement in that system is somewhat greater than in the other two.

DISPLAY 7 Space Needs and Construction Costs

	CCC	CSU	UC	All systems
Renovation and replacement of existing capacity				
Total inventory (ASF)	35,700,000	22,300,000	33,500,000	91,500,000
Annual replacement and renovation[1]	894,000	558,000	837,000	2,289,000
Cost per ASF	$260	$295	$340	–
Estimated annual cost	$232 million	$165 million	$285 million	$682 million
Additional capacity needed annually (FTES)				
Total	20,000	6,720	4,500	31,220
General projects	20,000	6,260	4,080	30,340
Converted space at CSU[2]	–	460	–	–
UC Merced	–	–	420	-
Costs for additional capacity				
General projects				
Needed ASF per FTES	42 sq ft	75 sq ft	140 sq ft	–
Cost per ASF	$350	$390	$525	–
Cost per FTES	$14,700	$29,300	$73,600	–
Annual cost	$294 million	$183 million	$300 million	$777 million
Converted space at CSU[b]	–	$11 million	–	$11 million
UC Merced	–	–	$33 million	$33 million
Total	$294 million	$194 million	$333 million	$821 million
Grand total	$526 million	$359 million	$618 million	$1,503 million

1 In ASF, assuming one fortieth of the inventory must be replaced each year.

2 About 75 percent of the FTES capacity growth at CSU Monterey Bay and CSU Channel Islands will be provided for by converting existing buildings at a slightly lower cost per FTES than new construction.

The cost of renovating and replacing obsolete space varies depending on the system. A Commission review of currently planned projects in the commu-

nity college system indicated that this cost is $260 per ASF when averaged over all projects. The corresponding figures for CSU and UC are $295 and $340 per ASF, respectively. The total cost of the construction and renovation needed to maintain the three systems' current level of capacity is $682 million annually.

Growth in enrollment demand will result in a need to provide funding for an additional 31,000 FTES annually. This figure is based on the deficits in each system projected for 2010–11, surplus capacity now available and capacity provided by currently funded projects. The costs of providing this capacity were based on a Commission review of construction costs, space standards, and budgets for specific projects such as UC Merced.

The total funding needed for additional capacity by the three systems is $821 million annually. Overall, California public college and university systems should spend $1.5 billion on construction and renovation each year to provide the capacity needed to maintain access to higher education.

Funding the capacity gap

Construction funding needed for public colleges and universities is significant, yet is not excessive given other demands on the State budget, and when considering the benefits derived from producing an educated population. Capital outlay needs for purposes other than higher education are expected to average $3 billion annually over the next decade, excluding the possible energy expenditures, as noted below. Total bond sales of $4 billion each year for infrastructure projects would allow $1 billion annually for higher education projects.

DISPLAY 8 Annual Capital Outlay Needs, Non-Higher Education

Category	Amount[1]
K-12 Education	$886 Million
Youth/Adult Correct.	949 Million
Resources/Environment	898 Million
Other Infrastructure	363 Million
Total	$3,096 million

1. Average of capital outlay needs from 1999–00 to 2008–09. Figures exclude highway construction (funded largely by gas tax revenues), and recent energy commitments.

California public college and university systems should spend $1.5 billion on construction and renovation each year . . . .

Currently, California has $36 billion in outstanding general obligation and lease revenue bonds. A Commission analysis done in 1999 shows that with new bond sales of $4 billion annually, the State's total debt service would increase by about $250 million each year. Total debt service would reach $5.5 billion in fiscal year 2010–11 and $8.2 billion in 2020–21). With growth in general fund revenues, this debt service would remain within comfortable limits, staying below 4.7 percent of general fund revenues.

Conditions have changed since the Commission completed *Providing for Progress* in 2000 (CPEC, 00-1). Due to the ongoing energy crisis, the State's bond rating has been downgraded, and there is a strong possibility that the State may be required to assume a number of difficult financial obligations. Included among these may be the outright purchase of electricity, costs for new power plants, and the possible acquisition of energy infrastructure previously owned by private utility companies. As a result, it is likely that future

debt service will be more than shown in Display 9. Some of these costs will be absorbed by utility rate payers, but there should be little doubt that a substantial share of the burden will be born by the State.

Compounding this problem is the current slowdown in the economy. Revenues to the State Treasury in 2000-01, and perhaps 2001-02, probably will be lower than anticipated. Looking longer term, however, both the economic and energy problems that seem so daunting now may well join the list of other problems from which this State has successfully emerged.

DISPLAY 9 Projected Debt service Assuming $4 Billion in Annual Bond Sales

Fiscal year	General Fund Revenue ($ Billion)	Debt Service[1]	
		$ Billion	Pct of GF Revenues
2000–01	$68.8	$3.13	4.5%
2005–06	94.2	4.30	4.6
2010–11	121.9	5.50	4.5
2015–16	141.4	6.70	4.7
2020–21	184.8	8.24	4.4

1. Debt service on existing bonds plus $4 billion in new bonds sold each year.

Regardless of how these problems eventually become resolved, it is well to note that education is always about hope for a better future. However, the mistakes or misfortunes of past decisions may turn, the need to provide for California's future will remain, and that will hinge largely on the willingness of today's citizens to invest now in the infrastructure that will provide for a better tomorrow. Through many elections, the people of this State have consistently affirmed, and reaffirmed, their willingness to support capital construction for higher education.

Providing opportunity for a college education to the next generation of Californians will take both increased support for facilities, and increased productivity by our campuses. In 2002, a new request should be put before the people of the State to provide for progress.